

Amendments to the Claims

Please amend Claims 13, 16 and 37 to read as follows. Note that all the claims currently pending in this application, including those not presently being amended, have been reproduced below.

Claims 1-12 (cancelled).

13. (Currently amended) A method for producing a scale provided coaxially and integrally with a conveying roller and adapted to detect a conveyance rotation angle, the method comprising the steps of:

integrating the conveying roller with a conveyance angle detection pattern writing member coaxially mounted with the conveying roller; and

holding a recording medium conveyance outer peripheral portion of the conveying roller integrated with the conveyance angle detection pattern writing member, and performing rotation angle allotment on the conveying roller conveyance angle detection pattern writing member to form a scale for detecting the conveyance rotation angle.

14. (Original) A method according to Claim 13, wherein the scale is a magnetic scale formed by magnetically effecting conveyance rotation angle allotment.

15. (Original) A method according to Claim 13 or 14, wherein the writing member is integrally provided with a conveying roller drive transmitting means.

16. (Currently amended) A method for producing a scale for detecting a conveyance rotation angle of a conveying roller provided in a recording apparatus adapted to perform recording on a recording medium conveyed while being held between the conveying roller and a driven roller by using recording means, the method comprising the steps of:

integrating the conveying roller with a conveyance angle detection pattern writing member coaxially mounted with the conveying roller; and

holding a recording medium conveyance outer peripheral portion of the conveying roller integrated with the conveyance angle detection pattern writing member, and performing rotation angle allotment on the conveying roller conveyance angle detection pattern writing member to form a scale for detecting the conveyance rotation angle.

17. (Original) A method according to Claim 16, wherein the scale is a magnetic scale formed by magnetically performing conveyance angle allotment.

18. (Previously amended) A method according to Claim 16 or 17, wherein the recording apparatus is an ink-jet recording apparatus which forms an image on the recording medium by discharging ink onto the recording medium.

19. (Previously amended) A method according to Claim 18, wherein the ink-jet recording apparatus is provided with an electrothermal converter for generating energy for discharging the ink.

20. (Original) A method according to Claim 16 or 17, wherein the writing member is integrally provided with a conveying roller drive transmitting means.

21. (Previously amended) A method according to Claim 20, wherein the recording apparatus is an ink-jet recording apparatus which forms an image on the recording medium by discharging ink onto the recording medium.

22. (Previously amended) A method according to Claim 21, wherein the ink-jet recording apparatus is provided with an electrothermal converter for generating energy for discharging the ink.

23. (Original) A method according to Claim 16 or 17, wherein, in the recording apparatus, a detecting device for detecting angle information provided on the scale is provided so as to be of the same phase as the driven roller with respect to the axis of the conveyance outer peripheral portion of the conveying roller.

24. (Previously amended) A method according to Claim 23, wherein the recording apparatus is an ink-jet recording apparatus which forms an image on the recording medium by discharging ink onto the recording medium.

25. (Previously amended) A method according to Claim 24, wherein the ink-jet recording apparatus is provided with an electrothermal converter which generates energy for discharging the ink.

26. (Original) A method according to Claim 16 or 17, wherein, in the recording apparatus, a detecting device for detecting angle information provided on the scale is elastically biased against the scale and arranged so as to be at a fixed distance from the recording means with respect to the recording medium conveying direction.

27. (Previously amended) A method according to Claim 26, wherein the recording apparatus is an ink-jet recording apparatus which forms an image on the recording medium by discharging ink onto the recording medium.

28. (Previously amended) A method according to Claim 27, wherein the ink-jet recording apparatus is provided with an electrothermal converter which generates energy for discharging the ink.

Claims 29-36 (cancelled).

37. (Currently amended) A recording apparatus comprising conveying means having a conveying roller and a pinch roller in close contact with said conveying roller, and detecting means for detecting a rotational angle of said conveying means, wherein a recording medium conveyed by said conveying means is recorded by recording means, said recording apparatus being manufactured by the steps of:

integrating the conveying roller with a conveyance angle detection pattern writing member coaxially mounted with the conveying roller; and

holding a recording medium conveyance outer peripheral portion of the conveying roller integrated with the conveyance angle detection pattern writing member, and performing rotation angle allotment on the conveying roller conveyance angle detection pattern writing member to form a scale for detecting the conveyance rotation angle.

38. (Previously amended) A recording apparatus according to claim 37, wherein said detecting means is biased to a magnetic scale of said conveying means to maintain a distance to said conveying means constant.

39. (Previously amended) A recording apparatus according to claim 37, wherein said recording apparatus is an ink jet recording apparatus for discharging ink on the recording medium to form an image.

40. (Previously amended) A recording apparatus according to claim 39, wherein said ink jet recording apparatus comprises an electrothermal converting member for generating energy utilized to discharge the ink.

Claims 41-44 (cancelled).